

C L A I M S

What is claimed and desired to secure by Letters Patent
is:

1. A graphic process for substantially simultaneously displaying on a computer display device variations in a plurality of communication network functions and comprising the steps of:
- (a) providing access to a plurality of communication network functions, each network function having a data value within a range of data values;
 - (b) dividing a display area into a plurality of display divisions;
 - (c) assigning each display division to a respective network function;
 - (d) scaling a variable graphic quality of each display division to said range of data values of said network function associated with said display division;
 - (e) periodically accessing each of said network functions to retrieve a respective current data value; and

(f) displaying for each display division a respective variation of said graphic quality which corresponds to said current data value of the network function associated with said display division.

2. A process as set forth in Claim 1 wherein said scaling a variable graphic quality includes the step of:

(a) scaling a shade value to said range of data values.

3. A process as set forth in Claim 1 wherein said scaling a variable graphic quality includes the step of:

(a) scaling a range of colors to said range of data values.

4. A process as set forth in Claim 1 wherein said scaling a variable graphic quality includes the step of:

(a) scaling a size of a display division to said range of data values.

5. A process as set forth in Claim 1 wherein at least one of said network functions includes a data set of a plurality of data members, each data member having a corresponding data member value within said range of data values, and including the steps of:
- (a) dividing said display division associated with said at least one of said network functions into a plurality of display subdivisions equal to said plurality of data members of said data set;
 - (b) assigning each of said display subdivisions to a respective one of said plurality of data members;
 - (c) periodically accessing said at least one of said network functions to retrieve a respective current data member value of each of said plurality of data member; and
 - (d) displaying for each display subdivision a respective variation of said graphic quality which corresponds to a current data member value of the data member associated with said display subdivision.

Subpart 17

6. A process as set forth in Claim 1 and including the steps of:

- (a) linking at least one of said display divisions to additional information associated with said network function associated therewith; and
- (b) displaying said additional information in response to graphic selection of said display division.

7. A process as set forth in Claim 1 and including the steps of:

- (a) linking at least one of said display divisions to graphically encoded information associated with said network function associated therewith; and
- (b) displaying said graphically encoded information in response to graphic selection of said display division.

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8. A process as set forth in Claim 1 and including the steps of:
- (a) linking at least one of said display divisions to additional information associated with said network function associated therewith; and
 - (b) displaying said additional information in response to placement of a graphic cursor within said display division.
9. A process as set forth in Claim 1 wherein said variable graphic quality varies in discrete steps, and said process including the step of:
- (a) displaying for each display division a respective step variation of said graphic quality which corresponds to said current data value of the network function associated with said display division.
10. A process as set forth in Claim 1 and including the step of:
- (a) displaying human readable indicia on at least one of said display divisions to thereby identify a network function associated with said one display division.

11. A graphic process for substantially simultaneously displaying on a computer display device variations in a plurality of communication network functions and comprising the steps of:

- (a) providing access to a plurality of communication network functions, each network function having a data value within a range of data values;
- (b) dividing a rectangular display area into a plurality of display divisions;
- (c) assigning each display division to a respective network function;
- (d) for each network function, scaling a set of a plurality of colors to the range of data values of said network function;
- (e) periodically accessing each of said network functions to retrieve a respective current data value; and
- (f) displaying for each display division a respective one of said colors which corresponds to said current data value of the network function associated with said display division.

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12. A process as set forth in Claim 11 wherein at least one of said network functions includes a data set of a plurality of data members, each data member having a corresponding data member value within said range of data values, and including the steps of:

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- (a) dividing said display division associated with said at least one of said network functions into a plurality of rectangular display subdivisions equal to said plurality of data members of said data set;
 - (b) assigning each of said display subdivisions to a respective one of said plurality of data members;
 - (c) periodically accessing said at least one of said network functions to retrieve a respective current data member value of each of said plurality of data member; and
 - (d) displaying for each display subdivision a respective one of said colors which corresponds to a current data member value of the data member associated with said display subdivision.

13. A process as set forth in Claim 11 and including the steps of:

- (a) linking at least one of said display divisions to additional information associated with said network function associated therewith; and
- (b) displaying said additional information in response to graphic selection of said display division.

14. A process as set forth in Claim 11 and including the steps of:

- (a) linking at least one of said display divisions to graphically encoded information associated with said network function associated therewith; and
- (b) displaying said graphically encoded information in response to graphic selection of said display division.

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15. A process as set forth in Claim 11 and including the steps of:

- (a) linking at least one of said display divisions to additional information associated with said network function associated therewith; and
- (b) displaying said additional information in response to placement of a graphic cursor within said display division.

16. A process as set forth in Claim 11 and including the step of:

- (a) displaying respective human readable indicia on each of said display divisions to thereby identify a network function associated with said display division.

17. A process as set forth in Claim 11 and including the step of:

- (a) scaling a size of a selected display division to a variable associated with a network function to which said selected display division is assigned.

18. A graphic process for substantially simultaneously displaying on a computer display device variations in a plurality of communication network functions and comprising the steps of:

- (a) providing access to a plurality of communication network functions, each network function having a data value within a respective range of data values;
- (b) at least some of said network functions including a plurality of data members, each data member having a corresponding data member value within a respective range of data values;
- (c) dividing a rectangular display area into a plurality of rectangular display divisions;
- (d) assigning each display division to a respective network function;
- (e) dividing each display division associated with a plurality of data members into a plurality of rectangular display subdivisions representing the associated plurality of data members;
- (f) for each network function, scaling a color set of a plurality of colors to a range of data values of said network function;

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- (g) displaying human readable indicia on each of said display divisions to thereby identify a network function associated with said division;
 - (h) periodically accessing each of said network functions to retrieve a respective current data value; and
 - (i) displaying for each display division and display subdivision a respective one of said colors which corresponds to the current data value of the network function associated with said display division or display subdivision.

19. A process as set forth in Claim 18 and including the steps of:

- (a) linking each of said display divisions and display subdivisions to additional information regarding the network function associated therewith; and
- (b) displaying said additional information in response to graphic selection of said display division.

20. A process as set forth in Claim 18 and including the steps of:

- (a) linking at least one of said display divisions to graphically encoded information regarding the network function associated therewith; and
- (b) displaying said graphically encoded information in response to graphic selection of said display division.

21. A process as set forth in Claim 18 and including the steps of:

- (a) linking at least one of said display divisions to additional information associated with said network function associated therewith; and
- (b) displaying said additional information in response to placement of a graphic cursor within said display division.

22. A process as set forth in Claim 18 and including the step of:

- (a) scaling a size of at least one of said display divisions to a variable associated with the network function to which said display division is assigned.

23. A process as set forth in Claim 18 and including the step of:

- (a) scaling a size of at least one display subdivision to a variable associated with a data member represented by said one display subdivision.